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AEDES PURPUREIPES IN WESTERN ARIZONA

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Rapid melting of record snowfall and rains in the upper reaches of the Colorado River drainage in 1983 led to the release, from storage facilities, of huge quantities of water into the lower Colorado River basin. The resultant flooding increased areas for mosquito breeding, and arboviral activity was noted in vector species (D. B. Francy, unpublished data). In 1984, subsequent studies of virus activity in mosquitoes by the Centers for Disease Control (CDC) and routine surveillance by the U.S. Army Environmental Hygiene Agency revealed the presence of *Aedes (Kompiia) purpureipes* Aitken in two counties of western Arizona. All specimens collected were females.

Aedes purpureipes occurs in northwestern Mexico and southern Baja California; and until the time of this study, it was known in the U.S. from only Pima, Cochise and Santa Cruz counties of southeastern Arizona (Zavortink 1972, McDonald et al. 1973). It is a tree hole breeder and is associated with cottonwood (*Populus*), hackberry (*Celtis*), and palo verde (*Cercidium*) in the hotter and drier regions of its range. It is

also found in riparian woodland and oak-pine forest at elevations up to 1700 m. The integument of the thorax and abdomen of this striking, medium-sized mosquito is yellowish to golden in color and marked with silvery scale patches.

The first specimen was collected on August 2, 1984, at Blue Water Marina, Parker, La Paz Co., Arizona, in a CDC light trap supplemented with dry ice (coll.—Gordon C. Smith¹). The specimen was identified as *Ae. purpureipes* by E. L. Peyton and Dr. R. E. Harbach, Walter Reed Biosystematics Unit (WRBU), National Museum of Natural History, Washington, DC. Traps were hung in a cluster of mesquite (*Prosopis*) and salt cedar (*Tamarix*) and also yielded *Culex tarsalis* Coquillett, *Psorophora signipennis* (Coquillett) and a few *Ps. columbiae* (Dyar and Knab).

Two additional specimens were collected on September 7, 1984, at the Pre-School, Yuma Proving Ground, Yuma County, Arizona, in a CDC light trap supplemented with dry ice (coll.—Paul Weimann³). The trap was hung in a mature palo verde next to an oleander (*Nerium oleander*) and a California fan palm (*Washingtonia filifera*); it also yielded *Cx. tarsalis* and *Ae. taeniorhynchus* (Wiedemann). The identification of these specimens as *Ae. purpureipes* by the junior authors was confirmed by Dr. Bruce A. Harrison, WRBU. These specimens are deposited in the National Museum of Natural History, Washington, DC.

Another *Ae. purpureipes* was collected on October 3, 1984, in a salt cedar windbreak near the main gate of the Yuma Proving Ground in a CDC light trap supplemented with dry ice (coll.—Paul Weimann³). The collection also included *Cx. tarsalis*, *Ps. columbiae*, and *Anopheles franciscanus* McCracken. The site was about 400 m from the Pre-School site.

Collection of this species in Yuma and La Paz counties, Arizona, is a considerable western and northward extension of its range. It seems likely that collections on the California side of the river will also yield *Ae. purpureipes* since ecological conditions there are similar to the Arizona side of the river.

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